

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/DE2004/002501

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 A47G1/06 A47G1/14

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 A47G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/196365 A1 (BRACKER STEVEN D ET AL) 23 October 2003 (2003-10-23)	1-3,5,6, 11-14, 16-19
Y	the whole document	7-9, 27-31
X	US 6 594 934 B1 (WONG WING HANG) 22 July 2003 (2003-07-22)	1-3,5,6, 11-14, 16-19
Y	the whole document	7-9,28
	DE 201 12 225 U1 (HEINE, OLIVER) 24 January 2002 (2002-01-24) cited in the application the whole document	-/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

24 March 2005

05/04/2005

Name and mailing address of the ISA  
 European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
 Fax: (+31-70) 340-3016

Authorized officer

Alff, R

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/DE2004/002501

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/079386 A1 (NOBLE WYNNE) 1 May 2003 (2003-05-01) figure 8 -----	1,20-22
X	US 6 052 933 A (LYTLE ET AL) 25 April 2000 (2000-04-25) figures 1-3 -----	1,27
X	US 3 987 995 A (HAMASAKI ET AL) 26 October 1976 (1976-10-26) the whole document -----	1 27-31
X	US 5 592 768 A (TESTA ET AL) 14 January 1997 (1997-01-14) the whole document -----	1 30,31
Y		

BEST AVAILABLE COPY

## INTERNATIONAL SEARCH REPORT

Information on patent family members

Internal Application No

PCT/DE2004/002501

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2003196365	A1	23-10-2003	NONE		
US 6594934	B1	22-07-2003	CN GB	2383428 Y 2345847 A	21-06-2000 26-07-2000
DE 20112225	U1	24-01-2002	NONE		
US 2003079386	A1	01-05-2003	NONE		
US 6052933	A	25-04-2000	FR GB	2787982 A1 2345245 A	07-07-2000 05-07-2000
US 3987995	A	26-10-1976	NONE		
US 5592768	A	14-01-1997	NONE		

BEST AVAILABLE COPY